GENESIS MISSION ELECTRONIC NEWSLETTER



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THE BEST OF 2002

2002 was an important year in the mission, initiating the process of science collection and data analysis. The Genesis mission project members wish you the very best in 2003. Happy New Year!

JANUARY



Genesis Mission Prepares for February National Engineers Week

Mathematics and science teachers offer students the opportunity to interact

with Jet Propulsion Laboratory engineers. Conduct a Genesis education activity, and your students may submit questions for the upcoming National Engineers Week <u>Webcast</u>. Encourage your students to consider engineering as a career and support <u>National Engineers Week</u>.

FEBRUARY Students Get Down With Gravity

Have you ever ridden a skateboard, or seen someone roll down a hill on one? Watch the JPL Genesis



mission Webcast as "Kids Get Down With Gravity." Jet Propulsion Laboratory Trajectory Analyst Jennie Johannesen and Genesis Mission Project Manager Chet Sasaki join Alta Loma, CA, teacher Tom Curley and students in an activity that examines how gravity affects skateboards AND planetary orbits!

MARCH

LANL Genesis Data Now Open to the Science Community

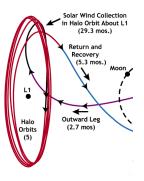
Visit the Los Alamos National Laboratory (LANL) Genesis mission data Web site. It contains



solar-wind browse plots based on onboard calculated ion moments and electron spin angle plots from August 24, 2001 to present.

APRIL Genesis Halo Orbit #1 Contest

The Genesis spacecraft will complete its first halo orbit around L1 in early May 2002. Because Lissajous orbits are by definition not truly periodic orbits, the exact completion



time of the first orbit is not exactly known. Join in our <u>contest</u> and predict the time that the spacecraft will complete its first orbit.

MAY

Loop One Completed. Four to Go.

JPL Release: Genesis Mission Status "NASA's Genesis spacecraft, on a mission to collect particles of the solar wind, successfully conducted its first flight path maneuver yesterday after completing its first loop around a gravitational point between the Sun and Earth," according to the latest release from the Jet Propulsion Laboratory. "Genesis crossed the finish line of its first loop and moved smoothly into its second loop yesterday," said Genesis mission Manager Don Sweetnam.



May 2 Space Day Fun

The Genesis mission sponsored May 2, 2002 Space Day online activities for kids across the country. In a single day, over 150 children had fun with the Genesis

scavenger hunt by completing a quiz to win their choice of prizes.

JUNE

"Genesis is a Leader in This Brave New World"

Meet Martin W. Lo of the Jet Propulsion Laboratory, Pasadena, CA, as he talks about the "InterPlanetary Superhighway," and



"chaos theory" in this timely interview.

A recent Discovery Magazine Innovation Award nominee, Martin notes, "The way science gets done is that there is a real-world problem, which can be stated in an abstraction. This leads to something else in the real world. The interaction of the abstract and the practical is the most exciting part of my job. I find beauty in the design of nature when highly abstract ideas can be turned into useful engineering tools to solve problems in the real world."

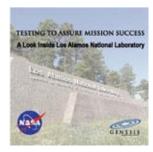


Genesis and the Scout Report

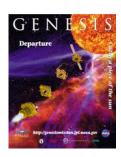
The Internet Scout Project selected the <u>Genesis Press Room: Video Releases</u> for inclusion in the National Science Digital Library Report for Math, Engineering, and Technology (June 21, 2002). The report is a biweekly current awareness publication that highlights new and newly discovered Internet resources.

JULY New Genesis Mission Video Release

McREL Genesis Education and Public Outreach announces the release of a new Genesis mission



video. "Testing to Assure Mission Success: A Look Inside Los Alamos National Laboratory." Roger Wiens, the project team lead for the Genesis mission at Los Alamos National Laboratory, has been working with mission concept and design since its inception in the early 1990s.



A Back to School New Education Module for Teachers

Check out the latest Genesis in education module, "<u>Destination L1:</u> <u>A Thematic Travel Unit.</u>" This interdisciplinary module about the

Genesis spacecraft's journey to L1 takes a thematic approach to the concept of traveling and destinations.

AUGUST

Monitors
Development
Leader Bruce
Barraclough
Bridges Science
and Engineering



In this <u>interview</u>, Bruce talks about his Genesis mission work at Los Alamos National Laboratory and the challenge of bridging the disciplines of science and engineering.

SEPTEMBER OUTSTANDING CONTRIBUTION



In September 24 ceremonies on the Jet Propulsion Laboratory campus, the Genesis mission was awarded a NASA Group Achievement

Award, "For the outstanding contribution to successful development, test, and launch of the Genesis spacecraft and the implementation of an outstanding mission operations system."

OCTOBER

NSTA Selects Genesis Modules for SciLinks Textbook Project

Two education modules developed by McREL for NASA's Genesis mission have been selected for inclusion in their <u>SciLinks</u> textbook project. The two selections are Genesis education module: <u>Understanding Elements</u> and Genesis public module: <u>Sunlight and Solar Heat</u>.

NOVEMBER HAPPY ANNIVERSARY GENESIS!

This week the Genesis spacecraft exceeded the 1-year mark in the collection of solar wind samples.

Telemetry from the spacecraft indicates that it is spinning at a rate of 1.584 rotations per minute and in overall good health.

DECEMBER

Where is the Genesis Spacecraft Now? View the simulated <u>position</u> <u>of the Genesis spacecraft</u>. Most images are updated every 10 minutes.

